

A NEW WINE SUPERPOWER? AN ANALYSIS OF THE CHINESE WINE INDUSTRY

YUANBO LI¹

ISABEL BARDAJÍ ^{2*}

¹ Ph.D., Departamento de Economía y Ciencias Sociales Agrarias, Escuela Técnica Superior de Ingenieros Agrónomos, Universidad Politécnica de Madrid (Technical University of Madrid). Bachelor of China Agricultural University.
E-mail: lybgood123@gmail.com

² Professor, Departamento de Economía y Ciencias Sociales Agrarias, Escuela Técnica Superior de Ingenieros Agrónomos, Universidad Politécnica de Madrid (Technical University of Madrid).
E-mail: isabel.bardaji@upm.es

A New Wine Superpower? An Analysis of the Chinese Wine Industry

Abstract

China is one of the most attractive wine markets and a hopeful wine producer in the 21st century. Current studies of wine in China tend to focus on the wine market but seldom analyze the domestic wine industry which contributes approximately 80% of the total wine consumed in the country while Westerners know little of it. This paper analyzes the current situation and the perspectives of the wine industry in China considering both traditional conditions such as wine history, wine policies as well as recent conditions such as e-commerce, climate change and domestic economy trend. We conduct a “SWOT” of the Chinese wine industry considering four sectors (producing, processing, selling and consuming) and use a SWOT Matrix analysis. Then we provide strategies for the development of the Chinese industry from governmental level, industrial level and enterprises level.

Keywords China, Wine Industry, Situation, SWOT Analysis, Strategy

1. Introduction

The dramatic growth of the Chinese economy over the past three decades has encouraged international wine companies to enter the Chinese market and has also supported the development of the domestic wine industry. China is now the world's largest red wine consuming country with a population of 1.36 billion, and the world's second largest economy (Theguardian, 2014). China is an important wine producer as well. According to the International Organization of Wine and Vine (OIV), China had the second largest world vineyard area (799,000 ha) after Spain and the largest global grape production (11.10 million tons) (sixth largest global wine grape production 1.48 million tons) in 2014. China was the world's eighth largest wine producing country (11.18 million hectoliters) and accounted for 4.1% of the world wine production in 2014. The wine producing Region Yantai of Shandong became an observer of the OIV in 1987 and Ningxia became the first Chinese provincial region to be an observer of the OIV in 2012. Approximately 80% of the wine consumed in China is produced domestically.

Even though the Chinese wine industry has developed significantly, many problems remain such as the scarcity of technology and administrative experience, the lack of wine making standards, high cost and low yield, all of which hinder the further development of the domestic wine industry. Since China becoming a member of the World Trade Organization (WTO), the domestic wine industry has faced competition from international wine suppliers. However, new emerging factors such as e-commerce, wine tourism, the slowdown of the Chinese economic growth rate and the "anti-corruption" campaign present both challenges and opportunities for the Chinese wine industry.

2. Methodology and Materials

SWOT analysis has been a useful tool for analyzing complex strategic situations by reducing the information quantity needed to achieve a better decision (Helms and Nixon, 2010). SWOT analysis considers both the current strengths and weaknesses and the future

opportunities and threats (Corsi et al., 2013). The SWOT analysis has been applied in many scientific fields including studies of wine industry.

First, we analyze the Chinese wine industry under both traditional and new conditions. This part of research is mainly based on a literature review and secondary data collected from government reports, business reports, online resources, research papers. Second, we use the SWOT analysis (strength, weakness, opportunity, threat) to explore the internal and external factors that will determine the future development of the Chinese wine industry. Third, we examine both internal and external factors in four sectors (producing, processing, selling and consuming) of the wine industry to better understand their roles. We then establish SWOT matrix strategies of strength-opportunity, weakness-opportunity, strength-threat, and weakness-threat for the Chinese wine industry. Finally we identify strategies to enhance the development of the Chinese wine industry.

3. Result

3.1. Wine history

Alcohol drinking in China has a long history and it plays an important role in the life of Chinese people. Although in China grape wine is not the most consumed liquor, the Chinese grape cultivation history spans more than 3000 years. The Chinese name of grape “葡萄 Pu Tao” can also represent the grape wine and in ancient Chinese “葡萄” could also be written as “蒲陶” which means “gathering together to drink and getting drunk” (Wang and Huang, 2009).

During the Han Dynasty (206 B.C.-220 A.D.) *Vitis vinifera* (common grape vine) was introduced by the Chinese explorer Zhang Qian from central Asia. Wine grape cultivation and wine culture came to China along the Silk Road firstly in Xinjiang and then expanded to the rest of China. In the Yellow River region where the ancient Chinese civilization was nurtured, began the large-scale viticulture activities of wine grape planting and wine making (Liu and Murphy, 2007). During the Tang Dynasty (618 A.D.-907 A.D.) which was the largest and most powerful dynasty of China the grape wine drinking and grape wine

culture made great progress. For the wealth and stability of society, grape wine not only became a favorite drink of emperors and ministers but also was popular in folk. During this period, wine drinking behavior and wine culture were gathered by Chinese poems. The most famous Chinese poet Li Bai (701 A.D.-762 A.D.) expressed his love for wine in many of his poems. In many dynasties of China it is easy to find historical references of wine making and wine consumption (Jenster and Cheng, 2008).

3.2. Wine production

The first Chinese wine company Changyu was established in 1892 by Zhang Bishi (1841-1916) in the coastal city of Yantai, Shandong (Mitry et al., 2009). This marked the beginning of the Chinese wine industry. Wine grapes producing and wine making regions are widely distributed in China from the east coastal areas to the west desert areas where distinct geographical and climatic conditions exist (Fig.1, Table 1). In China main wine producing provinces (main wine regions in this province) are Shandong (Yantai, Penglai and Qingdao), Henan (Lankao and Minquan), Jilin (Tonghua), Gansu (Wuwei), Hebei (Changli and Shacheng), Xinjiang (Shanshan, Manasi and Shi Hezi), Shaanxi (Huxian, Danfeng, Yulin and Weibei), Liaoning (Hengren), Heilongjiang (Dongning), Yunnan (Mile, Dongchuan and Yongren), Tianjin (Jixian and Hangu) and Ningxia (He Lanshan).

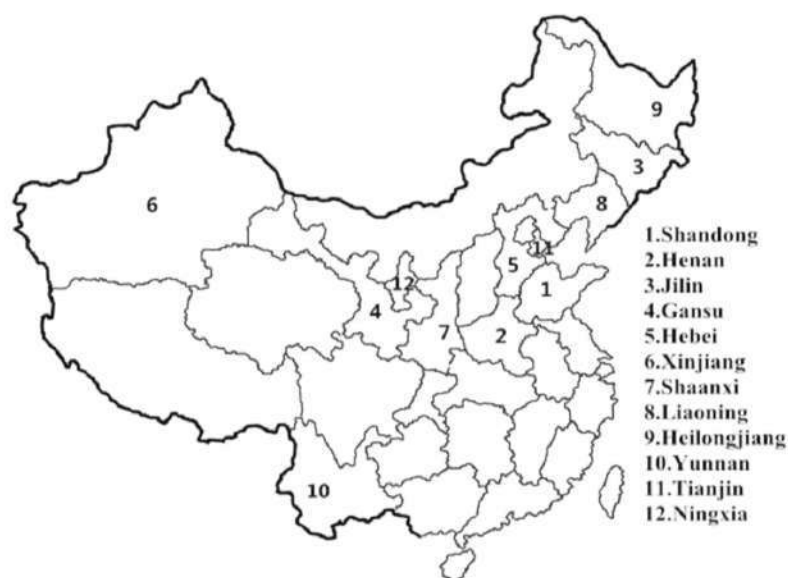


Fig.1 Main Wine Producing Regions of China. Drawn by author.

Table 1 Wine Production in China by Region. Unit: 10 million liters. Source: China Brewing Industry Yearbook 2008-2011, chyxx (2015).

2009		2010		2011		2012		2013		2014	
Province	Product	Province	Product	Province	Product	Province	Product	Province	Product	Province	Product
Shandong	35.828	Shandong	37.544	Shandong	44.609	Shandong	46.714	Shandong	44.499	Shandong	39.231
Jilin	21.9	Jilin	20.828	Jilin	20.652	Jilin	32.699	Jilin	26.736	Henan	16.777
Hebei	11.302	Henan	15.031	Henan	17.69	Henan	21.899	Henan	13.798	Jilin	16.55
Henan	10.333	Hebei	9.953	Hebei	9.371	Hebei	10.582	Hebei	6.515	Gansu	7.344
Tianjin	4.957	Tianjin	6.347	Tianjin	4.11	Liaoning	4.304	Heilongjiang	4.918	Hebei	6.665
Liaoning	2.742	Xinjiang	3.347	Ningxia	2.52	Heilongjiang	3.294	Shaanxi	4.127	Xinjiang	5.432
Hunan	1.56	Liaoning	2.678	Hunan	2.443	Tianjin	3.227	Liaoning	3.952	Shaanxi	5.405
Gansu	1.364	Hunan	2.289	Yunnan	2.387	Xinjiang	3.158	Xinjiang	2.996	Liaoning	4.057
Shaanxi	1.314	Ningxia	2.189	Heilongjiang	2.149	Shaanxi	3.022	Yunnan	2.182	Heilongjiang	3.822
Beijing	1.251	Gansu	1.675	Liaoning	2.017	Yunnan	1.850	Tianjin	2.098	Yunnan	2.461
Yunnan	1.183	Yunnan	1.529	Xinjiang	1.626	Ningxia	1.653	Ningxia	1.672	Tianjin	2.023
Xinjiang	1.169	Shaanxi	1.506	Shaanxi	1.529	Gansu	1.102	Gansu	1.021	Ningxia	2.022
Neimenggu	0.525	Heilongjiang	1.309	Gansu	1.407	Beijing	0.927	Beijing	0.832	Hunan	0.889
Heilongjiang	0.483	Beijing	1.019	Beijing	1.217	Neimenggu	0.821	Hunan	0.742	Jiangxi	0.851
Ningxia	0.423	Neimenggu	0.651	Neimenggu	0.854	Hunan	0.686	Jiangxi	0.559	Beijing	0.701
Shanghai	0.142	Jiangsu	0.203	Jiangxi	0.442	Jiangxi	0.660	Neimenggu	0.377	Neimenggu	0.658
Jiangsu	0.111	Guangxi	0.191	Guangxi	0.244	Fujian	0.320	Shanxi	0.242	Shanxi	0.626
Guangxi	0.109	Jiangxi	0.157	Shanxi	0.192	Shanxi	0.219	Guangxi	0.231	Guangxi	0.257
Shanxi	0.048	Shanghai	0.138	Shanghai	0.122	Guangxi	0.187	Hubei	0.153	Hubei	0.158
Chongqing	0.046	Hubei	0.116	Sichuan	0.052	Hubei	0.172	Sichuan	0.088	Sichuan	0.123
Sichuan	0.046	Sichuan	0.093	Hubei	0.048	Sichuan	0.081	Shanghai	0.065	Shanghai	0.033
Hubei	0.042	Shanxi	0.057	Guizhou	0.005	Shanghai	0.078	Fujian	0.031	Fujian	0.01
Guizhou	0.003	Chongqing	0.016	Zhejiang	0	Guizhou	0.007	Guizhou	0.002	Guizhou	0.004
Fujian	0.003	Fujian	0.009	Jiangsu	/	Zhejiang	0.000	Zhejiang	0.000	Zhejiang	0
Jiangxi	0	Guizhou	0.006	Fujian	/	Jiangsu	/	Jiangsu	/	Jiangsu	/

The domestic wine industry has developed significantly since the “reform and opening up” policy in 1978 (Fig.2). In the period of 1980-1990 the Chinese vineyard areas developed very slowly on the basis of around 30,000 ha with a small production of grape below 900,000 tons (Li et al., 2009). In this period the “half-juice wine” which mixed grape juice with water, sugar and other fruit juice was the main wine product in the market, and several problems of food quality existed. In the period of 1991-2000, the Chinese wine industry had a period of regulation and adjustment. In 1994 the production of certain “half-juice wine” containing less than 50% grape juice was permanently prohibited. By 2000 the vineyard area was 282,970 ha and the wine production was 2.02 million hectoliters. In the 21st century, due to the fast growing economy and increasing market demand, the Chinese wine industry has experienced rapid growth and both the yield and quality have been improved. This growth has been facilitated by the encouragement of government, the development of society and the advancement of technology. In 2004 the production of all kinds of “half-juice wine” was totally forbidden, which encouraged the production of fine wines containing 100% of grape juice. Since 2001 China has entered the World Trade Organization (WTO), a large number of foreign wines entered China bringing competition, new technology and management experience. The domestic wine production increased from 0.78 million hectoliters to 11.61 million hectoliters and the total vineyard area scaled up from 31,600 ha to 799,000 ha between 1980 and 2014 (Fig 2). Internationally, China plays an important role in wine production. In 2014 China was the 8th largest world wine producer with a volume of 11.18 million hectoliters after France, Italy, Spain, USA, Argentina, Australia and South Africa (Fig.3).

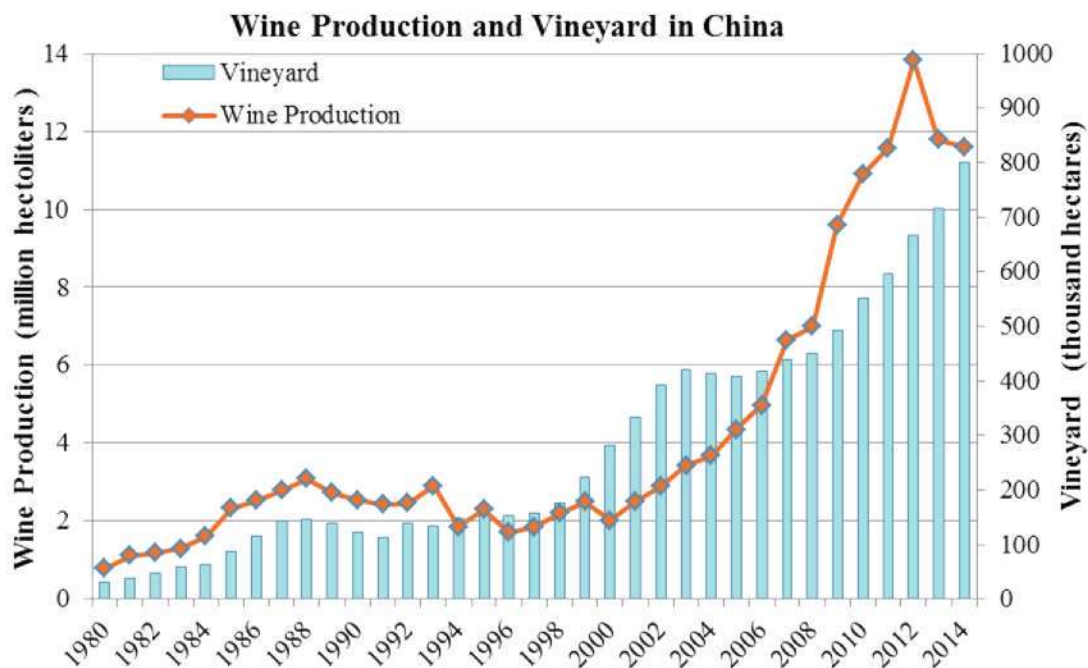


Fig.2 The Wine Product and Vineyard areas in China. Source: National Bureau of Statistics of China (2015), China Sugar&Liquor Yearbok (2011), ASKCI (2015), OIV (2015).

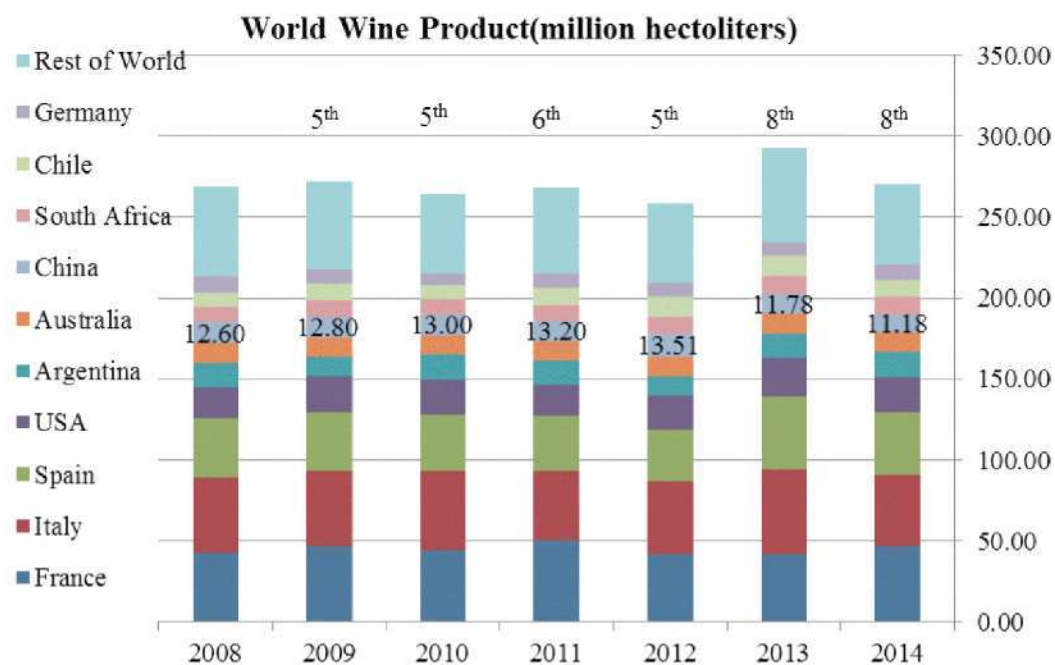


Fig. 3 World Wine Production (2008-2014). Source: OIV (2015).

In spite of the significant development of the Chinese wine industry there are many challenges to be addressed. Problems such as low yield and poor quality, homogeneity of products, and inconsistent standards, are hindering the development of the Chinese wine industry (Wang et al., 2010). The development of wine cluster needs several necessary supports such as a favorable development environment, good cooperations among enterprises and adequate talent resources (Ma and Qiao, 2009). Improved regulations and legislations are necessary to solve the existing confusion and irregularity in the whole process from wine grape planting to wine making (Li et al., 2009).

Global climate change is a common challenge for all countries. Changing climatic conditions will have significant impact on viticulture and wine production. The effects on viticulture of global climate change have been and are likely to be highly variable (Jones et al., 2005). Climate variables such as temperature, accumulated temperature, precipitation and frost free days affect the quality, quantity and distribution of wine (Fig.4). China is one of the fastest growing wine producing countries and has vast suitable areas for viticulture presenting new latitude regions and diverse sites (De Orduña, 2010; Hannah et al., 2013). Climate change has been clearly apparent in China with averagely increased temperature and increased accumulated temperature and varying precipitation. Regional variations of climate relevance such as rainstorm, drought, flood, frost and hail also have been experienced. Both challenges (benefits) and opportunities (harms) have been expected for the whole wine industry. Hence there is a great need of climate adaptation strategies and actions for the Chinese wine industry.

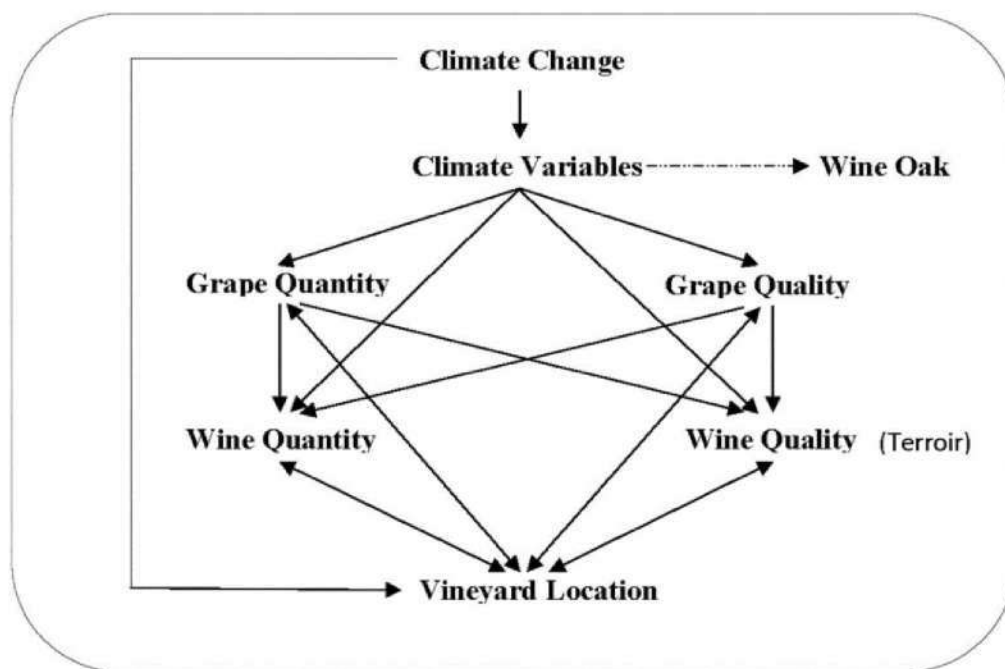


Fig.4 Climate Change and Viticulture. Drawn by author.

3.3. Government support

In recent decades, the Chinese wine industry has achieved great developments. Wine industry has been one of the most rapidly growing and promising light industries in China. The “12th Five-Year Plan” for the Chinese wine industry (2012) highlights the importance of government guidance and support to the Chinese wine industry especially in the improvement of wine producing regions, the adjustment of industrial structure, the development of science and technology, the assurance of product quality and the combination of wine culture and Chinese wine brands.

Politically, to guide and support the domestic wine industry China has released several national legislations and policies (Table 2) but compared to other wine producing countries which have a complete legal system, China still has a long way to go. There is a great need for a complete legal system such as the wine classification system for the domestic wines. In the approach to a complete wine legal system the small in-land

province Ningxia that has become the first Chinese province to be accepted as an official observer of the OIV in 2012 has got one step further (Table 3).

Institutionally, the grape and wine education is of great importance for the development of the Chinese wine industry, and talents with professional knowledge of grape cultivation, wine making, wine culture, wine tasting and wine business are more and more being welcomed in China. The need to develop the Chinese domestic wine industry urges the expansion of a high level education of wine. Until 2015, China had 16 universities (Table 4) offering the major “Viticulture and Enology Engineering” in the bachelor education and this number will keep rising. Among them, the “Northwest Agriculture and Forest University” and “China Agricultural University” are universities in the “211” project and “985” project, which means they not only have a good reputation but also advanced technologies and national support. Meanwhile, several advances in studies and technologies of grape and wine such as viticulture zoning, grape breeding, grape production have been achieved in China (Li et al., 2009).

In the meantime a growing interest of professional wine knowledge and culture has been observed. China has been one of the most important markets for the Wine&Spirit Education Trust (WSET) Organization that specializes in wine education (WSET, 2015). In big cities such as Beijing and Shanghai among people from a middle-class and business background there is a common belief that a good knowledge of wine can improve their self-cultivation and help their personal career.

Table 2 Main Chinese Legislations and Policies for the Wine Industry.

Source: ASKCI (2015) and collaborated by author.

National legislations and policies for the wine industry of China			
Name	Year	Area	Target
Hygiene Regulation of Factory for Wine GB 12696-90	1990	Industry	To regulate hygiene practices for food production
National Standard Wine (Old) GB/T 15037-1994	1994	Industry	To regulate the term of wine name, classification, technology, inspection, signs, packaging, transportation and storage
Analytical Methods of Wine and Fruit-wine (Old) GB/T 15038-94	1994	Industry	To offer principles for wine and fruit-wine quality monitoring
Standard Half-juice Wine GB/T1980-1994 Standard Hill Wine QB/T1982-94	1994	Industry	To offer food standard and abolish the production of wine that contains less than 50% of grape juice
National Standard Wine (New) GB15037-2006	2006	Industry	A revision of the old standard. To offer new standards which cover all processes from grape planting, wine production to transportation
Analytical Methods of Wine and Fruit Wine (New)	2006	Industry	To offer principles for wine and fruit-wine quality monitoring
Cleaner production standard — Wine industry HJ452-2008	2008	Environment	To provide the general requirements for the wine producers to have cleaner products meeting the national and local emission standards
China's wine industry twelfth five-year development plan	2012	Industry	To support and regulate the development of the Chinese wine industry
MOFCOM Announcement No.36 of 2013on Case-filing for Anti-dumping Investigation Against Wines	2013	Commerce	To initiate anti-dumping investigation against wine imports originated in the European Union (EU)
MOFCOM Announcement No.37 of 2013 on Case-filing for Countervailing Investigation Against Wines	2013	Commerce	To initiate countervailing investigation against wine imports originated in the European Union (EU)
MOFCOM Announcement No.19 of 2014 on Termination of Anti-dumping and Countervailing Investigations Against Imports of Wines from the European Union (EU)	2014	Commerce	To terminate the anti-dumping and countervailing investigations against the wine imports originated in the European Union (EU)

Table 3 Regulations for the Wine Industry of Ningxia. Source: Collected by author.

Regional regulations for the wine industry of Ningxia		
Name	Year	Target
Regulation on the protection of Eastern Foot of Helan Mountain Wine Region	2012	The first protection regulation for wine region in China
“Ningxia Classification System” for wineries	2013	The first winery classification system in China
Regulation on the protection of the geographical mark “Eastern Foot of Helan Mountain”	2014	Regulation to protect the geographic mark of wine region

Table 4 Major “Viticulture and Enology Engineering” in Chinese Universities.
Collected by author.

University	Province	University	Province
Northwest Agriculture and Forest University	Shaanxi	Shenyang Pharmaceutical University	Liaoning
China Agricultural University	Beijing	Dalian Polytechnic University	Liaoning
Beijing University of Agriculture	Beijing	Gansu Agricultural University	Gansu
Shandong Agricultural University	Shandong	He Xi University	Gansu
Taishan University	Shandong	Shanxi Agricultural University	Shanxi
Binzhou Medical University	Shandong	Ningxia University	Ningxia
Ludong University	Shandong	Chuxiong Normal University	Yunnan
Qingdao Agricultural University	Shandong	Xinjiang Agricultural University	Xinjiang

3.4. Wine demand

China was the fifth largest global wine market in 2014 with a consumption of 16 million hectoliters (table 5) which is almost the half of the total consumption of the United States of America (USA) and China has surpassed France as the largest global red wine market. Due to the economy’s expansion, the improved living standard and the growing middle class, there was a rising trend in both the total alcohol consumption and the per capita wine consumption of China from 2005 to 2012 (Fig.5). Even though the total national wine consumption is huge, the per capita wine consumption is still small with only 1.18 liters representing only 11.5% of the United States of America (USA) and 2.4% of French (table 5).

Table 5 Per capita wine consumption. Source: OIV (2015), WINEINSTITUTE (2015).

Country (2014)	Total consumption forecast (million hectoliters)	Wine consumption per capita (liters)
USA	31	10.25
France	28	42.51
Italy	20	33.30
Germany	20	24.84
China	16	1.18
UK	13	21.99
Spain	10	21.26
Argentina	10	23.46
Russia	10	6.95
World	240	3.56

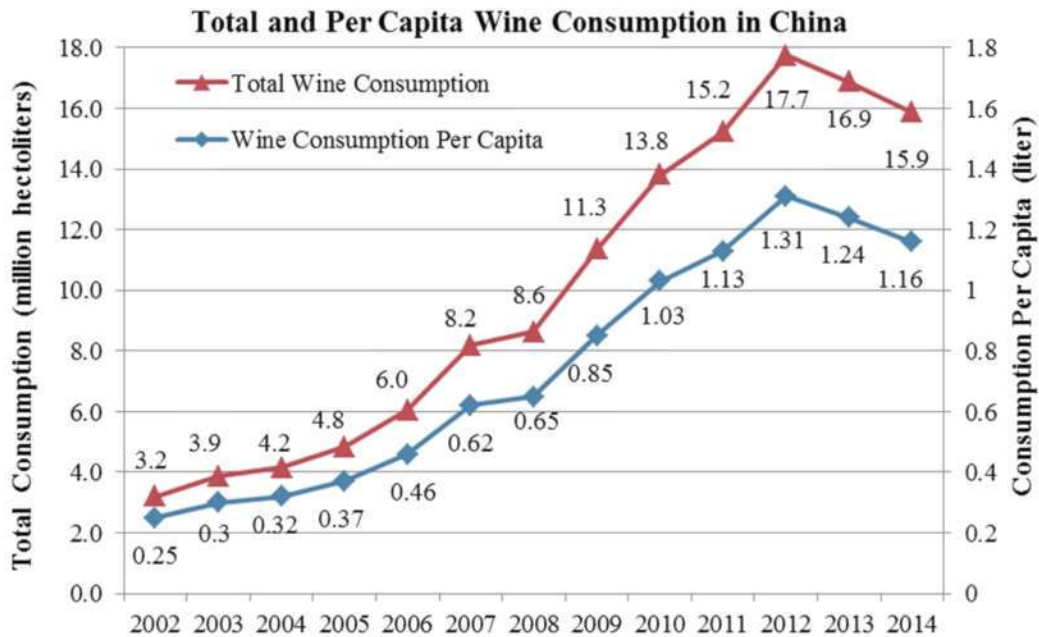


Fig.5 Wine Consumption in China. Source: ASKCI (2015), National Bureau of Statistics of China (2015) and calculated by author.

However, the Chinese annual GDP growth rate of 2015 has been announced officially to be 6.9 % with 0.4% less compared to 2014. The slowdown of the economic growth rate or the “new normality” of the Chinese economy affects both the consumption of wine and the production of wine in China (Fig.6). At the same time the “anti-corruption” campaign by the new Chinese government to some extent leads to a decrease in wine selling. This especially affects imported luxury wines that are often given as gifts to government

officials or businessmen. From 2012 to 2013 the wine consumption dropped from 17.48 million hectoliters to 16.82 million hectoliters with a rate of 3.8% and the wine production decreased more sharply from 13.82 million hectoliters to 11.78 million hectoliters with a rate of 14.7%. Although in 2014 the wine production decreased less than the year before, with 1.4%, the wine consumption sank approximately 6.1%. This trend affects the domestic wine industry and foreign wine companies. For wines from Bordeaux region the sales volume decreased by 9% and the sales value decreased by 17% in 2014 (thedrinksbusiness, 2015).

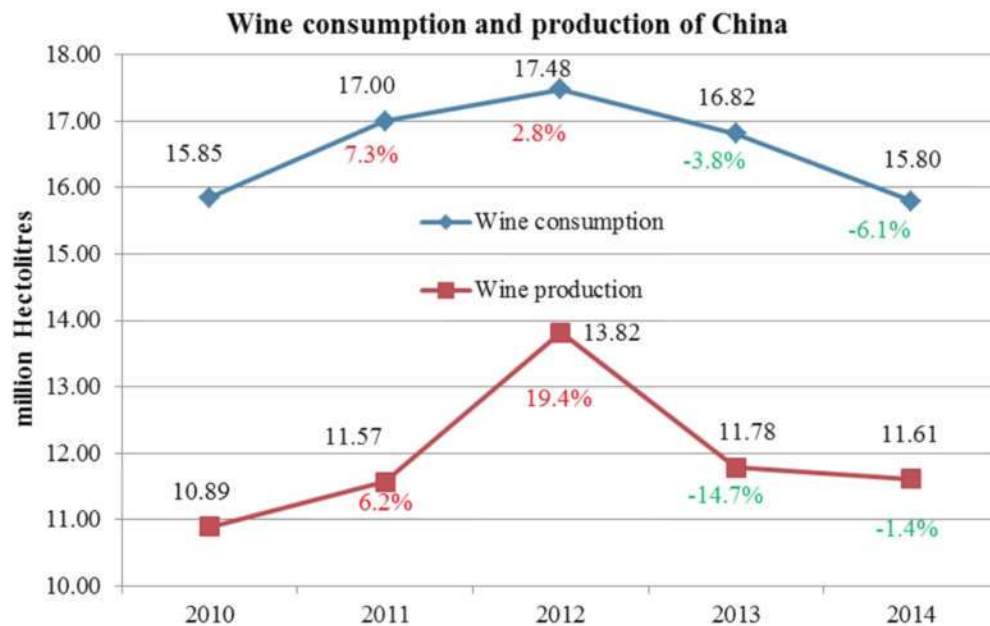


Fig. 6 Wine Consumption and Production of China. Source: OIV (2015), ASKCI (2015).

Even though the Chinese wine market has some volatility, there is an opportunity to further explore the domestic market of China. It is worth noting the dramatic development of e-commerce. Even since 2008 China has surpassed the United States as the country with the largest number of Internet users, the number of Internet shoppers keeps growing with dramatic pace and the size of e-commerce is enlarging with a high speed. The total e-commerce market size in 2018 is predicted to be 7,300 billion RMB (1,123 billion \$) (table 6). Several wine suppliers have participated in e-commerce which offers a new market channel for wine companies and a new shopping platform for wine consumers (table 7).

Table 6 E-commerce of China. Source: Internet Live Stats (2015), Statista (2015), IResearch (2015). F: forest.

Year	Internet users (million)	Year	On-line shoppers (million)	Year	E-market size (billion RMB)
2000	22.74	2006	33.57	2011	784.5
2014	614.6	2014	361.42	2018f	7300

Table 7 Main Wine E-commerce Suppliers in China. WineChina (2014). Collaborated by author.

Type	Name	Founded time	Business Model	% of Chinese wine (1 Oct. 2015)
Professional wine supplier	Yesmywine	2008	O2O,B2C	1%
	Winenice	2008	O2O,B2C	4%
	Pinwine	2009	O2O,B2C	0
	WangJiuWang	2011	O2O,B2C	0
Integrated alcohol supplier	JiuXianWang	2009	O2O,B2C	16%
	GouJiuWang	2011	B2C	22%
	ZhongJiuWang	2012	O2O	14%
E-Platform	JingDong	1998	B2C	
	Tmall	2003	B2C	
	Yihaodian	2008	B2C	

Chinese people do appreciate travelling with the purpose of relaxing and acquiring new knowledge. As a response to the interest of wine and the desire of leisure, wine tourism has developed in China (Qiu et al., 2013). The wine tourism (Fig.7) includes visiting wineries where the visitors may engage in several activities such as wine and food tasting, grape picking and learning about wine culture. Many local governments intend to develop the wine tourism to support the local wine industries and to attract investment. The Ningxia Government issued a plan to develop the “Helan Mountain Grape Culture Corridor” in 2011. By 2020 there will be a total number of 1 million acres of vineyards, one wine culture development center, 3 wine cities, 10 wine towns and more than 100 wineries (Chateaus) which will make this area a world-class wine and tourism region. Tourism industry will be developed based on natural sceneries (deserts, Yellow River etc.), ecological sceneries (theme park of ecological restoration of mining and industrial areas etc.), historical and cultural landscapes (local ethnic history and culture etc.) and

wine culture (wineries, wine museums, wine festivals etc.). Related industries such as real estate industry, food industry and film industry will also be developed.

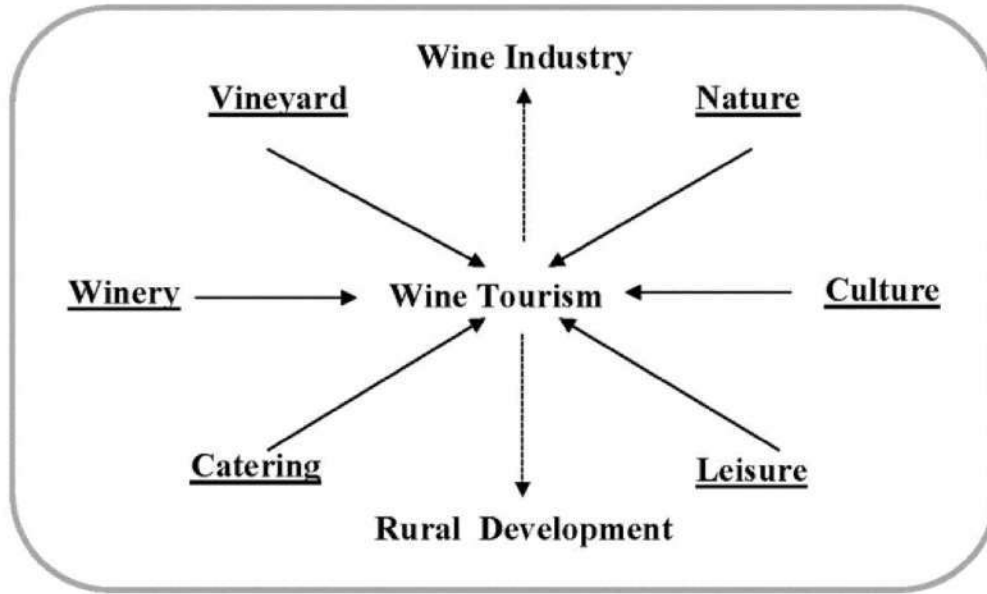


Fig.7 Wine tourism structure. Drawn by author.

3.5. Wine trade

Many Chinese wine enterprises possess vineyards in several parts of China to produce domestic wines. Several Chinese wine brands have had good reputation among Chinese customers such as the “Great Wall” of “COFCO”, the “Changyu” of “Yantai Changyu Group” and the “Dynasty” of “Dynasty Winery”. However, top Chinese wine companies are experiencing a market share decrease for the competition from both domestic and foreign wines (Table 8).

Since 2001 when China became a member of the World Trade Organization (WTO), the imported wine tariff fell from 65% to 14% (bottled wine) and 20% (bulk wine). Foreign wines began to enter the Chinese market at a fast pace. The import volume increased from 29.23 thousand tons to 383.43 thousand tons from 2001 to 2014 (13.1 times). The import value increased from 23.60 million US dollars to 1,503.34 million US dollars from 2001 to 2014 (63.7 times) (Fig.8). In 2013 an obvious decrease both in import

volume and import value could be observed for several domestic reasons such as the “slowdown of economic growth rate” and the “anti-corruption” campaign. For the whole Chinese market, approximately 20% of the whole wine consumed in China is imported wine. France, Australia, Chile, Spain, Italia are main wine exporters of China (Fig 9). French wines occupy the largest sale volume and the largest sale value of bottled wine in China. For Chinese customers, France culture and food bring a good image to French wines and contribute heavily to the sale success (Yu et al., 2009). New Zealand and Chile have got the zero-tariff to enter the Chinese market in 2012 and 2015 separately while Australia will get totally zero-tariff in 2019. Along with the lower- priced wines such as Spanish wines, the Chinese wine which mainly has price advantage in the lower- priced wine market will face a big challenge.

Table 8 Market Share of in China. Source: Euromonito International (2014).
Collaborated by author.

Market Share (%) by Volume of top Chinese Wine Enterprises						
Enterprise	Headquarters	2009	2010	2011	2012	2013
COFCO	Beijing	9.9	6.9	5.7	4.8	3
Yantai Changyu Group Co Ltd	Yantai, Shandong	5.6	5.3	5.1	4.1	3
Dynasty Winery Co Ltd	Tianjin	3.6	3.3	2.2	1.4	0.9
Yantai Weilong Grape Wine Co Ltd	Yantai, Shandong	3.1	2.8	2	1.3	0.9
Citic Guoan Group	Beijing	/	0.7	0.8	0.9	0.9
Vats Group	Beijing	1.2	1.2	1	0.8	0.7
Castel Groupe (China)	Shanghai	0.8	0.7	0.7	0.6	0.6
Macrolink Group	Beijing	0.8	0.8	0.7	0.6	0.6
China Tontine Wines Group Ltd	Hongkong	1.5	1.4	1.3	1.1	0.5
Yantai Pengzhu Winery Co Ltd	Yantai, Shandong	0.8	0.7	0.6	0.5	0.5
Total		27.3	23.8	20.1	16.1	11.6
Rest Enterprises		72.7	76.2	79.9	83.9	88.4

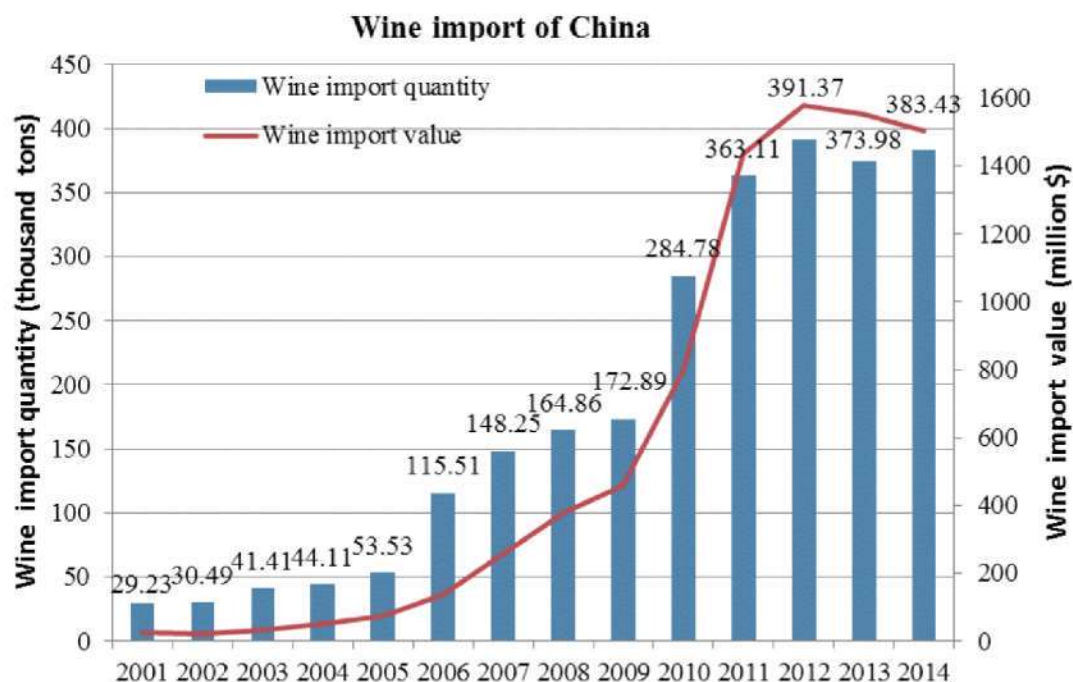


Fig. 8 Wine Import of China (2002-2014). Source: UN Comtrade (2015).

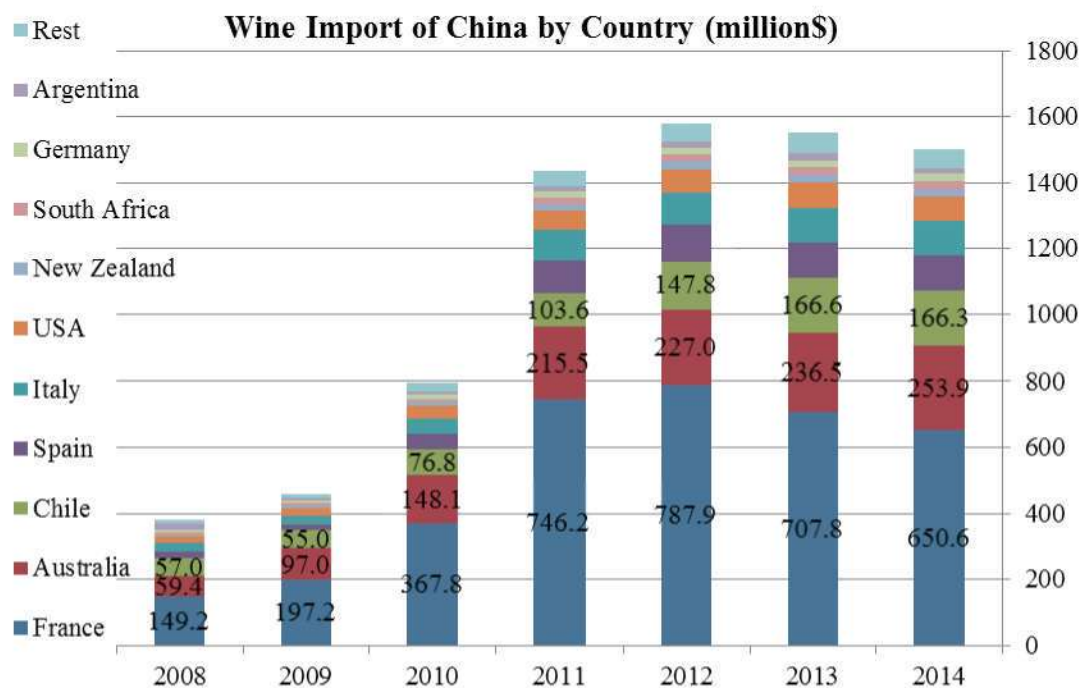


Fig. 9 Wine Import of China by Country (2008-2014).

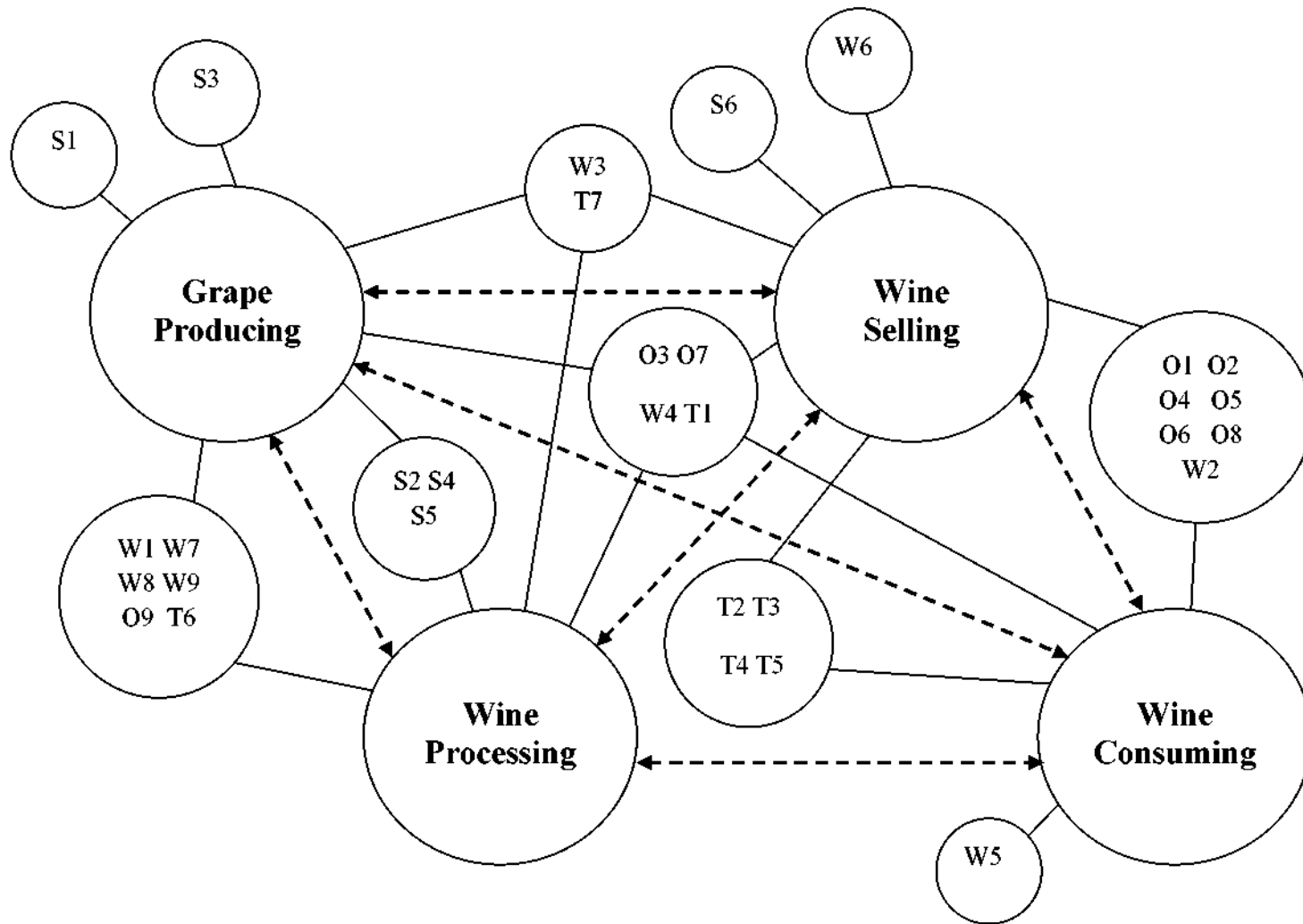
Source: Caculated by Data from UN Comtrade.

3.6. SWOT analysis of the Chinese wine industry

3.6.1. Identify strengths, weakness, opportunities and threats

Strengths	Weaknesses	Opportunities	Threats
1. Broad territory for vineyards.	1. Lack of experience, technology, infrastructure, and professional talents.	1. Large population size and huge market demand.	1. Competition from foreign wines (such as high technology, mature management system, zero- tariff).
2. High potential for wine grape planting and wine making due to the excellent and diverse environmental/ecological conditions.	2. Lack of wine culture and heritage.	2. Increasing economy (per-income) and improved living standard.	2. Competition from other alcohol drinks.
3. Varieties of local wine grape.	3. Lack of a complete legal system of wine.	3. Government support (political, educational technical, financial).	3. Slowdown of the China's economy.
4. Grape planting and wine making regions are widely distributed.	4. Low quality and yield, distinct standards, homogeneity of products.	4. Health benefits of wine and red is a "lucky" color in China.	4. Sale falls for the "anti-corruption" campaign.
5. Sufficient labor force in the Chinese wine industry.	5. Wine is not the traditional alcohol drink in China.	5. Dining and gift giving custom of Chinese.	5. Mistrust of consumers towards the safety and quality of Chinese food products.
6. Price advantage of domestic wines especially for the low-end consumers of China.	6. Lack of some international well-known brands of China.	6. More interest on wine and wine culture; increasing wine knowledge levels of Chinese customers.	6. Negative effects of climate change.
	7. Regionally uneven development of the Chinese wine industry.	7. Development of the wine related industries such as wine tourism, grape picking, wine tasting, exhibition.	7. Rising cost of raw material and labor.
	8. Non-oriented and irrational investment in the Chinese wine industry.	8. E-commerce.	
	9. Lack of highly developed wine clusters.	9. Positive effects of climate change.	

3.6.2. Classify internal and external factors according to the sector of wine industry: producing, processing, selling and consuming



3.6.3. Explore SWOT strategies by Matrix: SO, ST, WO, and WT

SWOT matrix for the wine industry of China											
Prod	S1	S2	S3	S4	S5	W1	W3	W4	W7	W8	W9
O3											
O7											
O9											
T1											
T6											
T7											
Proc	S2	S4	S5	W1	W3	W4	W7	W8	W9		
O3											
O7											
O9											
T1											
T6											
T7											
Sell	S6	W2	W3	W4	W6	Cons	W2	W4	W5		
O1						O1					
O2						O2					
O3						O3					
O4						O4					
O5						O5					
O6						O6					
O7						O7					
O8						O8					
T1						T1					
T2						T2					
T3						T3					
T4						T4					
T5						T5					
T7											
Legend				SO Strategy		ST Strategy		WO Strategy		WT Strategy	
Prod: Grape Producing, Proc: Wine Processing, Sell: Wine Selling, Cons: Wine Consuming											

4. Certain strategies for the development of the Chinese wine industry

4.1. Governmental level

1. At the present stage the Chinese wine industry is in the early phase of industrialization with a comparatively weak industrial base. The Chinese government should fully support the domestic wine industry from legal, financial, technical, educational and cooperative levels.

2. A complete wine law system targeting all the phases of wine industry from grape planting and wine producing to wine selling and wine trade is highly needed. Meanwhile efforts to regulate the local wine industry such as the “Regulation on the protection of Eastern Foot of Helan Mountain Wine Region” of Ningxia should be encouraged.

3. A national wine classification regulation which has been practiced in many main wine producing countries such as France, Italy and Spain should be introduced.

4. Wine product quality standards, wine quality control and inspection systems should be further improved while a wine quality and safety traceability system should be established.

5. International exchange and cooperation are beneficial for the Chinese wine industry in which advanced technology and management experience can be learned. The Yantai (Shandong) and the Ningxia Hui autonomous Region have been observers of the International Organization of Vine and Wine (OIV). More international conferences such as the “2013 International Academic Conference of Vine and Wine in Ningxia” can be held in China in order to promote the Chinese wine industry and seek international cooperation.

6. Government leading mitigation and adaptation actions are indispensable for the Chinese wine industry to face the current and coming challenges and opportunities caused by global climate change which are also highly variable in different wine producing regions.

7. As the Chinese wine market has reached a new period of development with improved wine product and increasing domestic wine demand, there is a need to popularize wine knowledge and spread wine culture by wine education and wine training to guide Chinese customers for a rational and healthy consuming behavior in which domestic wine associations, wine institutes and wine academies can cooperate with government.

8. Wine culture and history with Chinese characteristics can be further excavated. Wine historical remains should be fully protected and more facilities such as wine museums and wine theme parks could be built.

4.2. Industrial level

1. The Chinese wine industry can fully take advantage of the broad and suitable Chinese territories for wine grape planting. The wine grape growing conditions of current large vineyard areas can be improved.
2. The domestic wine regions are widely distributed and each wine region has its own natural and social condition. Hence, grape variety and cultivation selection should be considered in distinct wine regions for a diverse and sustainable development.
3. Advisable plan of industry, upgrade of industrial structure and industrial innovation are key factors for the development of Chinese wine clusters. The advantage of abundant natural resources in the west Chinese wine regions and the advantage of well-known domestic wine brands and sufficient capital in the east Chinese wine regions can be combined.
4. Wine related industries such as wine tasting, grape picking, wine tourism and wine exhibition can lead to a diverse development of local wine industry and create vast job opportunities.
5. The appearance of wine chateau especially in the Shandong Peninsula and the Ningxia Hui Autonomous Region is the focus of Chinese wine enterprises towards domestic high quality wines and luxury brands. Also the appearance of chateau which combines quality wines with culture and history can enhance the quality of Chinese wines and motivate domestic customers. However, there is a great need to regulate and classify the rising Chinese chateau wines by specific regulations.

4.3. Enterprises level

1. The confidence of Chinese customers towards domestic wine quality is a determining factor for the survival of Chinese wine companies. Meanwhile, product differentiation and product innovation can contribute to the improvement of domestic wines which face fierce a competition from foreign wines.
2. China has a large population and a huge economy that offer an exciting market and a major potential of wine consumption. However, wine products must be adapted to conform to consuming tradition, market trends, and a declining rate of economic growth. In the vast area of small Chinese cities and countryside there is a major potential demand for lower- priced wines.
3. Wine is not only an alcoholic drink but also a representative of culture and history. Hence, it is reasonable to endow domestic wines with cultural symbolism. While an interest in foreign cultures will continue contributing to the consumption of foreign

imported wines, domestic vintners should highlight the Chinese culture and cater to the Chinese traditions.

4. The lack of wine knowledge and information hinders wine consumption of domestic customers. It is necessary to broadcast wine knowledge and guide customers' wine drinking behaviors. The total number of Chinese on-line consumers is increasing annually and e-commerce has offered a new platform where wine companies have new channels for wine selling and customers have a new option for wine purchase. A new marketing network which combines traditional market channels and e-commerce is crucial for the market expansion and the market competitiveness of Chinese wine companies.

5. Conclusion

During the developing of this research, we have presented the perspectives and the situation of the Chinese wine industry considering both traditional and new conditions to show its evolution and dynamics.

The Chinese wine industry has had a great advance being benefited from excellent natural condition, growing domestic economy, strong government support, and advanced technologies. There is a great need to make a further improvement in several aspects such as the establishment of a complete wine law system and a wine classification regulation which need a further cooperation between the Chinese government and the whole Chinese wine industry.

While opportunities such as e-commerce and increasing wine knowledge levels of customers are heightened, coming challenges such as the sales decrease and climate change cannot be ignored.

In conclusion, although the wine history of wine is long, the Chinese wine industry is still young and there are many things to be observed along its development road with both challenges and opportunities.

6. References

- China Brewing Industry Yearbook (2008-2011). Publication of China Alcoholic Drinks Association.
- China Sugar&Liquor Yearbook (2011). Publication of China National Association for Liquor and Spirits Circulation.
- Corsi A.M., Marinelli N., Sottini V.A. (2013) Italian wine and Asia: policy scenarios and competitive dynamics. *British Food Journal*, 115(3): 342-364.
- De Orduña R.M. (2010) Climate change associated effects on grape and wine quality and production. *Food Research International*, 43(7): 1844-1855.
- Hannah L., Roehrdanz P.R., Ikegami M., Shepard A.V., Shaw M.R., Tabor G., Zhi L., Marquet P.A., Hijmans R.J. (2013) Climate change, wine, and conservation. Proceedings of the National Academy of the Sciences of the United States of America, Washington, 2013.
- Helms M.M., Nixon J. (2010) Exploring SWOT analysis –where are we now? A review of academic research from the last decade. *Journal of Strategy and Management*, 3(3): 215-251.
- Li H., Li J.G., Yang H.C. (2009) Review of Grape and Wine Industry Development in Recent 30 Years of China's Reforming and Opening-up (In Chinese). *Modern Food Science and Technology*, 25(4): 341-347.
- Liu F., Murphy J. (2007) A qualitative study of Chinese wine consumption and purchasing Implications for Australian wines. *International Journal of Wine Business Research*, 19(2): 98-113.
- Jenster P., Cheng Y.T. (2008) Dragon wine: developments in the Chinese wine industry. *International Journal of Wine Business Research*, 20(3): 244-259.
- Jones G.V., White M.A., Cooper O.R., Storchmann K. (2005) Climate change and global wine quality. *Climatic Change*, 73(3): 319-343.
- Ma X.R., Qiao J. (2009) Cluster Development of Wine Industry in China: Status, Measurement and Evaluation (in Chinese). *Technology Economics*, 28(5): 41-46.
- Mitry D.J., Smith D.E., Jenster P.V. (2009) China's role in global competition in the wine

Industry: A new contestant and future trends. *International Journal of Wine Research*, 2009, 1: 19-25.

Qiu H.Z., Yuan J., Ye B.H., Hung K. (2013) Wine tourism phenomena in China: an emerging market. *International Journal of Contemporary Hospitality Management*, 25(7): 1115-1134.

Wang H., Zhao X.H., Liu J., Fu R.P. (2010) Research progress in sustainable development of grape and wine production (in Chinese). *Scientia Agricultura Sinica*, 43 (15): 3204-3213.

Wang S.Z., Huang P. (2009) Discussion on grape wine history in China (in Chinese). *Liquor-Making Science & Technology*, 2009, 11: 136-143.

Yu Y., Sun H.H., Goodman S., Chen S.W., Ma H.Q. (2009) Chinese choices: a survey of wine consumers in Beijing. *International Journal of Wine Business Research*, 21(2): 155-168.

ASKCI (2015). <http://www.askci.com/>

CHYXX (2015). <http://www.chyxx.com/>

Euromonitor International (2015). <http://www.euromonitor.com/>

International Organization of Vine and Wine (OIV) (2015). <http://www.oiv.int/es/>

Internet Live Stats (2015). <http://www.internetlivestats.com/>

IRResearch (2015). <http://www.iresearchchina.com/>

National Bureau of Statistics of China (2015). <http://www.stats.gov.cn/>

Statista (2015). <http://www.statista.com/>

The DrinksBusiness (2015). <https://www.thedrinksbusiness.com/2015/03/bordeaux-takes-hit-over-china-crackdown/>

The Guardian (2014). <http://www.theguardian.com/world/2014/jan/29/china-appetite-red-wine-market-boom>

The Wine Institute (2015). <http://www.wineinstitute.org/resources/statistics>

UN Comtrade (2015). <http://comtrade.un.org/>

Wine China (2014). <http://www.winechina.com/html/2014/10/201410269220.html>

Wine&Spirit Education Trust (WSET) (2015). <http://www.wsetglobal.com/>